

METAL PATTERN FORMING METHOD

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Abstract of JP8051058

PURPOSE: To provide the title method by which the microscopic pattern of silicide metal, having the specific resistance smaller than WSix such as TiSi, CoSi, PtSi, NiSi and the like, can be formed with less variation in line width.

CONSTITUTION: A metal layer 38, which becomes the radical of silicide metal, is formed on the base substrate in such a manner that at least a part of the metal film 38 is brought into contact with the surface of a silicon 12, an antireflection film 42 is formed on the base substrate where the metal film 38 is formed, a resist film 44 is formed on the antireflection film 42, and the resist film 42 is processed into the prescribed pattern by conducting a photolithography processing. After the metal film 38 has been etching-processed using the resist film 44 of the prescribed pattern as a mask, the metal film 38 is silicified by heat treatment, and a silicide layer 38a of the prescribed pattern is obtained. The optical constant and the film thickness of the antireflection film 44 is determined in such a manner that the standing-wave effect, when a photolithography process is conducted, becomes the minimum in accordance with the type of the metal film 42.

